
PROPOSED PLAN

MILITARY MUNITIONS RESPONSE PROGRAM

SR 932 – FORMER 1980s PISTOL RANGE

AIR FORCE PLANT 44

TUCSON, ARIZONA

PERFORMANCE BASED REMEDIATION

SOUTHWEST GROUP

AIR FORCE PLANT 44, ARIZONA

CREECH AIR FORCE BASE, NEVADA

DAVIS-MONTHAN AIR FORCE BASE, ARIZONA

NELLIS AIR FORCE BASE, NEVADA

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1.0 INTRODUCTION

This Proposed Plan (PP) concerning SR932 Munitions Response Site (MRS), also known as the Former 1980s Pistol Range, located at Air Force Plant (AFP) 44 in Tucson, Arizona (Figure 1) is submitted for public review and comment. The PP at this MRS recommends No Further Action (NFA). NFA is recommended following completion of an Engineering Evaluation/Cost Analysis (EE/CA), a Non-Time Critical Removal Action (NTCRA) as recommended by the EE/CA, and a NTCRA Completion Report. The NTCRA Completion Report documented that lead levels in soil are below the State of Arizona residential soil remediation level at the MRS.

The SR932 MRS is located within the Final Assembly and Checkout (FACO) area that Raytheon operates as a Government Owned/Contractor Operated facility at AFP 44 in Tucson, Arizona. SR932 MRS was the location of a pistol range encompassing 0.71 acres.

A Phase I Comprehensive Site Evaluation (CSE) performed in 2009 determined that there were no explosive hazards associated with munitions (UXO) at the site. The 2011 Phase II CSE determined that there was one contaminate of concern – lead – at levels in the soil just above the State of Arizona's residential soil remediation level. The Phase II CSE concluded there were no unacceptable risks to the environment (because the site is a highly disturbed area that is not considered to be a habitat) but that the risk posed to human health needed further evaluation.

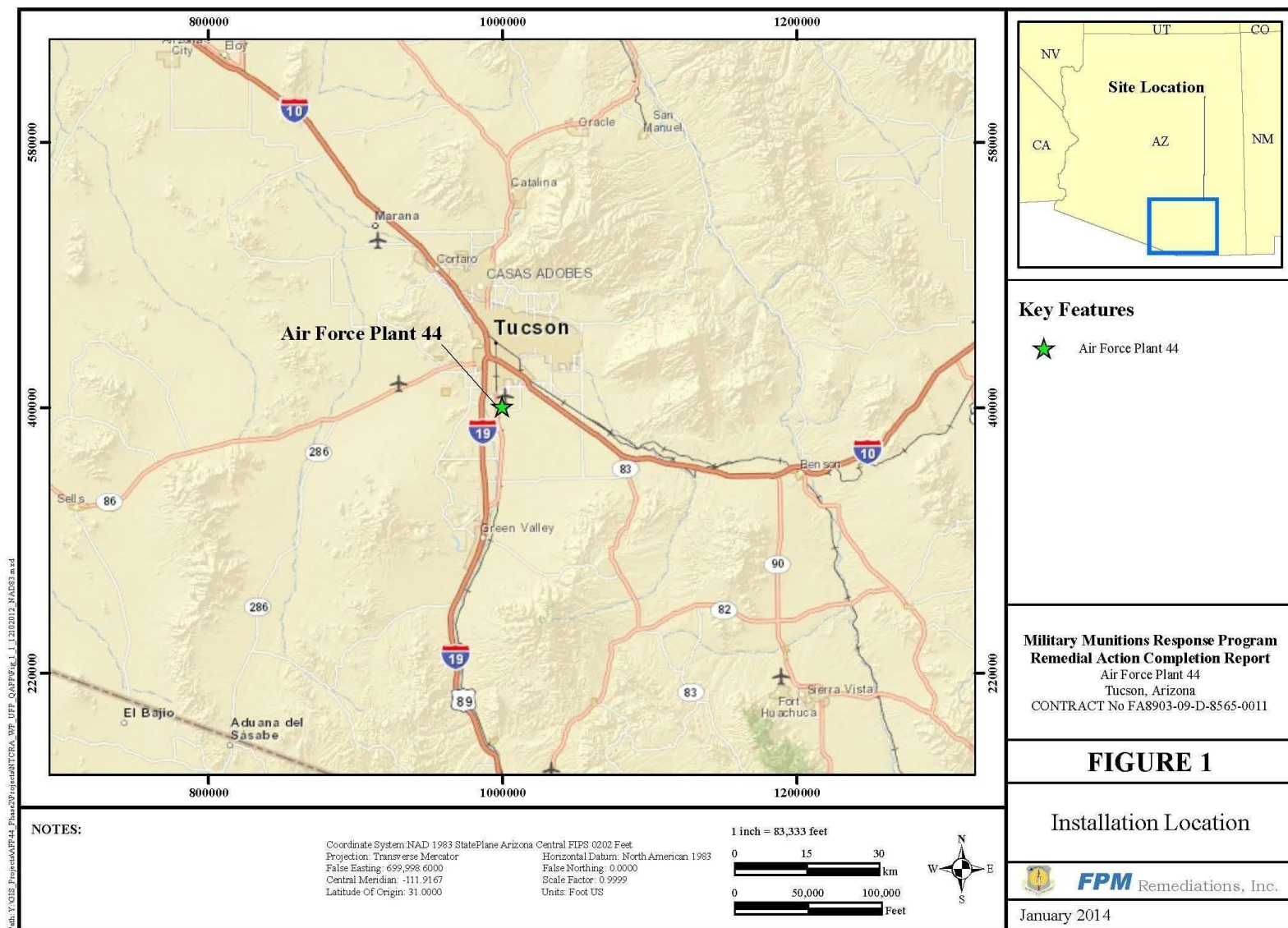
The Phase II CSE recommended that an EE/CA followed by a removal action be performed to complete the investigation and provide a final action at SR932 MRS. The objective of the removal action was to achieve site closure to residential standards, allowing Unlimited Use of the site and Unrestricted Exposure to the soil (UU/UE).

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulation, and the National Contingency Plan (NCP), state that the cleanup process can be streamlined when warranted by circumstances through the development of an EE/CA, followed by the preparation of an Action Memorandum, and the performance of a removal action; as opposed to conducting a Remedial Investigation and Feasibility Study followed by a Record of Decision (ROD), and a remedial action. The detailed Phase I and II CSE activities and conclusions are documented in the CSE Reports and the EE/CA, and are briefly summarized in this document.

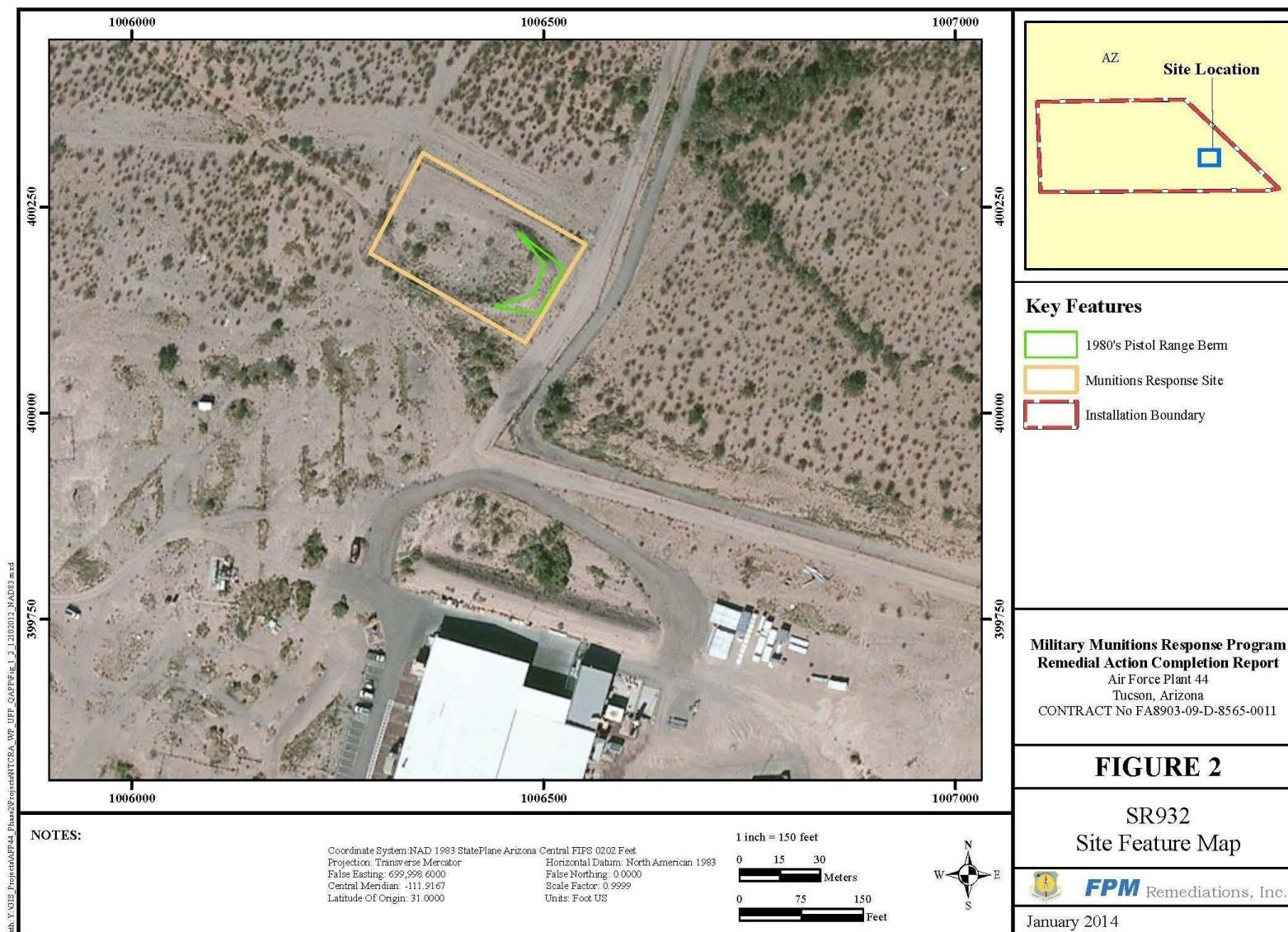
Figure 2 on page 3 (Figure 2 from the NTCRA Completion Report) shows the SR932 MRS location within AFP 44. The MRS boundaries are depicted in yellow and the backstop area of the range is outlined green. Lead contaminated soil was primarily found in the area of the backstop. During the Phase II CSE, 0.60 acres of SR 932 were not impacted and were recommended for NFA. As a result, the acreage of SR932 MRS was decreased from 0.71 acres to 0.11 acres. Figure 3 on page 4 (Figure 3 from the NTCRA Completion Report) shows the area where the contaminated soil was removed.

This document has been prepared by the Air Force Civil Engineering Center (AFCEC) in coordination with the United States Environmental Protection Agency (USEPA) and the Arizona Department of Environmental Quality (ADEQ). This PP meets the requirements of the Military Munitions Response Program (MMRP), CERCLA Section 117(a), and Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). These references allow for a site to be recommended for NFA if no unacceptable risks exist under the residential use scenario.

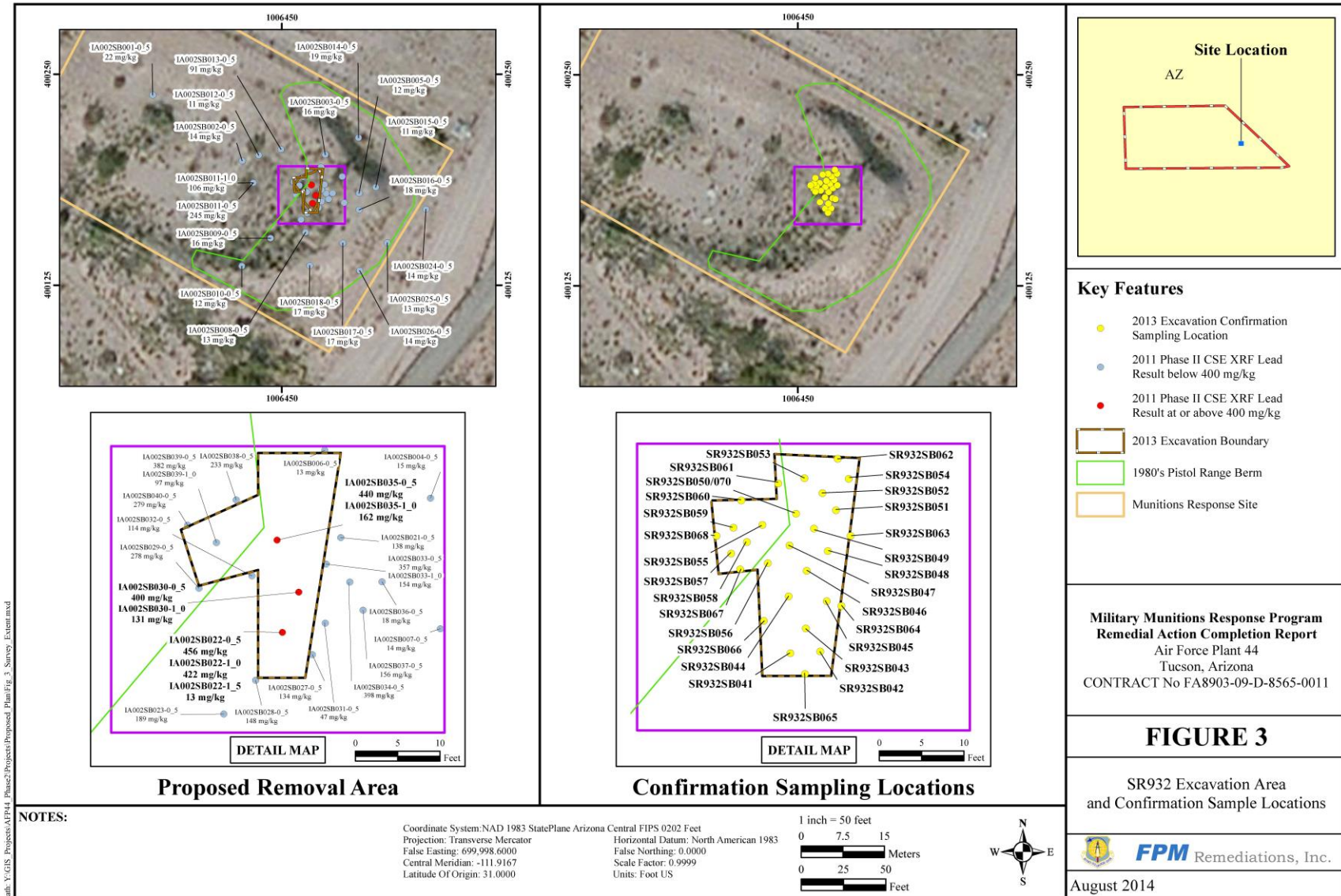
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This PP may be modified based on any new information acquired during the 30-day public comment period. The AF, as lead agency, will make a final decision on the need for additional action following consultation with the USEPA and ADEQ. This decision will be made after reviewing and considering all information submitted during the public comment period. Therefore, the public is encouraged to review and comment on all information presented in this document.

Additional information can be found in the NTCRA Completion Report (*FPM, 2014*), which was approved by USEPA and ADEQ. This document recommended NFA. The NTCRA Completion Report and other documents pertinent to this site are contained in the Administrative Record. The Administrative Record location is provided on page 8 of this document. The public is also encouraged to review the documents in the Administrative Record to gain a better understanding of investigations that have been conducted at this MRS. (See the Section "Mark Your Calendar" for information regarding submitting comments. Written comments can be sent to the address listed on the bottom of that page).

2.0 BACKGROUND

Historical features indicating potential areas of munitions activities were identified at AFP44 in the Modified Phase I CSE (Innovative Technical Solutions Inc. [ITSI], 2009). Specifically, two former pistol range locations were identified – 1950s Pistol Range and 1980s Pistol Range. The Modified Phase I CSE (Section 1.3.1) determined that additional investigation was required for both ranges. No other munitions response sites were identified. A CSE Phase II investigation of both sites was performed in October 2010.

The 1950s Pistol Range and 1980s Pistol Range, evaluated in the CSE Phase II, comprised approximately 1.77 acres of the total 1,319 acres at AFP44. SR932 MRS is

currently 0.11 acres and site features are shown in Figure 2. Because historical uses of the sites were limited to small arms, Munitions and Explosives of Concern (MEC) and Munitions Debris (MD) were not suspected to be present and were not found in the area of the former ranges.

Upon completion of the CSE Phase II, the 1950s Pistol Range became SR931 MRS and the 1980s Pistol Range became SR932 MRS. The Phase II CSE report for SR932 MRS determined that three sampling locations in an area approximately 25 feet by 25 feet had levels of lead slightly above the residential soil remediation level of 400 milligrams per kilogram. These levels were 400, 440, and 456, as shown on Figure 3, red dots in Proposed Removal Area detail.

The CSE Phase II Reports recommended that no further action was required for the 1950s Pistol Range (SR931 MRS). This recommendation was approved by ADEQ on 30 September 2011. The CSE Phase II Reports also recommended the following additional actions be performed on the 1980s Pistol Range (SR932 MRS):

- 1) Further human health evaluation of the portion of SR932 MRS where lead levels in surface soil exceeded residential soil remediation levels.
- 2) An EE/CA followed by a removal action (as opposed to a Remedial Investigation/Feasibility Study) to complete the investigation and as the final action at the site.

Following the recommendations of the Phase II CSE, a determination was made based on the NCP Removal Action factors that a Removal Action was warranted. An EE/CA was prepared that evaluated alternatives for addressing the lead-contaminated soil above residential levels. This decision was documented in an Action Memorandum (EE/CA Action Memorandum, *FPM, 2013a*). After approval of the EE/CA and Action Memorandum by USEPA and ADEQ, the NTCRA was undertaken at

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SR932 MRS in September-October 2013, with the goal of site closure with unlimited use and unrestricted exposure (UU/UE). The NTCRA removed 7.3 cubic yards of lead contaminated soil. The endpoint confirmation samples results are provided in Table 1. The ADEQ residential soil remediation level is 400 milligrams per kilogram. The NTCRA Completion Report recommending NFA received concurrence without comments from ADEQ on 21 May 2014 and USEPA on 23 June 2014.

3.0 SITE CHARACTERISTICS

As shown in Figure 2 on page 3, the SR932 MRS is the 0.11-acre Small Arms Range located in the FACO area of AFP44. The site was used for Security Forces Training and limited to small arms. It should be noted that SR932 MRS was initially 0.71 acres. As a result of the Phase II CSE, NFA was approved by ADEQ and USEPA for 0.60 acres.

The topography of the SR932 MRS is generally flat and the site is currently unused, with a fence around three sides. The fourth side is the former backstop for the range. Soils at the SR932 MRS consist of very gravelly fine sandy loam (Sahuarita) and sandy loam (Mohave). The groundwater beneath the MRS is approximately 100 feet below ground surface and was not impacted by SR 932 (as soil contamination was limited to a depth of 1.0 feet below ground surface).. There are no wetlands or surface waters in the area. Vegetation is consistent with desert scrubland consisting mainly of mesquite trees, creosote bush, desert zinnia, and other commonly associated plant species. Because there is a fence around the FACO installation, access to the SR932 MRS is primarily restricted to Raytheon personnel who need to be in the FACO area.

Analyte	Lead
Units	mg/kg
Location	
SR932SB041	18
SR932SB042	12
SR932SB043	12
SR932SB044	97
SR932SB045	340
SR932SB069 dup of SB045	43
SR932SB046	34
SR932SB047	8.8
SR932SB048	7.8
SR932SB049	9.2
SR932SB050	83J
SR932SB070 dup of SB050	10J
SR932SB051	9.7
SR932SB052	13
SR932SB053	26
SR932SB054	7.6
SR932SB055	72
SR932SB056	11
SR932SB057	190
SR932SB058	80
SR932SB059	340
SR932SB060	140
SR932SB061	20
SR932SB062	8.7
SR932SB063	30J
SR932SB064	6.9
SR932SB065	9.5
SR932SB066	9.7
SR932SB067	18
SR932SB068	330
SR932SB071 dup of SB068	230

Table 1. NTCRA Confirmation Sampling Results, SR932 MRS

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4.0 SUMMARY OF SITE RISKS

A risk assessment, which evaluated the potential risks to human health and the environment by the contamination of the site, was done as part of the Phase II CSE. The assessment determined that there was no risk to the environment (because the site is a highly disturbed area that is not considered to be a habitat) but that risk to human health had the potential to exist if the lead contaminated soils were left in place. The removal action performed in September-October 2013 eliminated the risk by removing the lead-contaminated soil, as confirmed by soil sampling that documented that the lead levels in the soil at the site are now below the ADEQ residential soil remediation level of 400 milligrams per kilogram. Additionally, since no MEC or MD were discovered during the investigations and NTCRA activities, human health and ecological risks associated with MEC and MD are not present.

5.0 DESCRIPTION OF THE PREFERRED REMEDY

The Air Force recommends NFA for SR932 MRS based on the results of the intrusive investigations conducted during the Phase II CSE and the follow-up removal action that removed the lead-contaminated soil to residential cleanup levels. This NFA designation requires no land-use controls or restrictions, and no capital, operational, or maintenance costs.

A NFA recommendation for the SR932 MRS is supported by the following facts:

- There is no record that explosives were ever used at this site; nor was any MEC or MD were discovered during the Phase I and II CSE activities;
- The limited amount (7.3 cubic yards) of soil that contained lead has been removed from the site; and
- Confirmation sampling, as documented in the NTCRA Completion Report,

confirmed that lead levels in soil are below the ADEQ Soil Remediation Level for residential soil (400 milligrams per kilogram).

6.0 COMMUNITY PARTICIPATION

AFCEC will provide information on the closeout of the SR932 MRS to the public through public meetings, the Administrative Record file, and media announcements published in local newspapers.

This PP, the EE/CA, the EE/CA Action Memorandum, and NTCRA Completion Report will be made available for public review at the document repositories for AFP44 located at the Valencia Community Library.

A public notice of the availability of the Proposed Plan that states the public has a 30-day public comment period and a brief summary of the Proposed Plan will be placed in the Arizona Daily Star newspaper at least two (2) days prior to the beginning of the public comment period. Based on the level of public interest, AFCEC will schedule a public meeting and provide an overview of the 932 MRS NTCRA Completion Report findings, answer questions, and accept public comments on the PP.

AFCEC strongly encourages the public to review and comment on this PP. If any significant new information or public comments are received during the public comment period, the PP may be modified to incorporate new information. Information regarding the NTCRA performed at the SR932 MRS is also available to the public through the Information Repository.

AFCEC will consider the public comments on this PP during the preparation of the Record of Decision (ROD).

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MARK YOUR CALENDAR!

PUBLIC COMMENT PERIOD:

17 September – 16 October, 2014

AFCEC will accept written comments on the Proposed Plan during the public comment period.

PUBLIC MEETING:

15 October, 2014

AFCEC will hold a public meeting to explain the Proposed Plan and the reasons for No Further Action recommendations for SR932 MRS. Oral and written comments will be accepted at the meeting. The meeting will be held at the El Pueblo Library at 4:30 to 5:00 PM, 101 West Irvington Rd.

Tucson, Arizona 85714

Phone: (520) 594-5250

ADMINISTRATIVE RECORD FILE:

For more information on SR932 MRS, including technical reports and reference material, see the Administrative Record. The file is located at the following website:
<http://afcec.publicadminrecord.us.af.mil/Search.aspx>

INFORMATION REPOSITORY

LOCATION:

Community members interested in the full technical details beyond the scope of this Proposed Plan can also find key supporting documents that pertain to SR932 MRS at the Valencia Library, 202 West Valencia Road, Tucson AZ 85706. (520) 594-5400 Contact: Kathy Konecny

7.0 REFERENCES

EPA 540-R-98-031, Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents; USEPA, July 1999.

FPM Remediations, Inc. 2013. Final Engineering Evaluation/Cost Analysis 1980s Pistol Range SR932 MRS, AFP44, Tucson, Arizona. January 2013.

FPM Remediations, Inc. 2013a. Final Engineering Evaluation/Cost Analysis Action Memorandum 1980s Pistol Range SR932 MRS, AFP44, Tucson, Arizona. August 2013.

FPM Remediations, Inc. 2013b. Final Non-Time Critical Removal Action Work Plan 1980s Pistol Range SR932 MRS, AFP44, Tucson, Arizona. August 2013.

FPM Remediations, Inc. 2014. Final Non-Time Critical Removal Action Completion Report 1980s Pistol Range SR932 MRS, AFP44, Tucson, Arizona. June 2014.

ITSI, 2009. Modified Comprehensive Site Evaluation Phase I Report, November 2009.

ITSI, 2010. Final Comprehensive Site Evaluation Phase II Work Plan, September 2010.

ITSI, 2011. Comprehensive Site Evaluation Phase II Report, November 2011.

If you have any written comments to this PP or have any questions or concerns about environmental activities at SR932 MRS, please contact the following:

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8.0 GLOSSARY AND TERMS

Administrative Record - The body of documents that “forms the basis” for the selection of a particular response at a site. Documents that are included are relevant documents that were relied upon in selecting the response action as well as relevant documents that were considered but were ultimately rejected. Until the Administrative Record is certified, it shall be referred to as the “Administrative Record file.”

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Congress enacted CERCLA (42 USC § 9620 et seq.), commonly known as Superfund, on 11 December 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

Military Munitions – Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges; and devices and components thereof.

Military Munitions Response Program (MMRP) - The MMRP category is defined as response actions (i.e., the identification, investigation, and Remedial Actions, or a combination of removal and Remedial Actions) to address MEC or MC. This includes the removal of foreign military munitions if it is incidental to the response

addressing DoD military munitions at a Formerly Used Defense Site (FUDS) property (ER 200-3-1).

Munitions and Explosives of Concern (MEC) – Specific categories of military munitions that may pose unique explosives safety risks, including Unexploded Ordnance, Discarded Military Munitions, or Munitions Constituents present in high enough concentrations to pose an explosive hazard.

Munitions Debris (MD) – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions Response Site (MRS) - A discrete location within a Munitions Response Area that is known to require a munitions response.

National Oil and Hazardous Substance Pollution Contingency Plan (NCP) - Revised in 1990, the NCP is the regulation that provides the regulatory framework for responses under CERCLA. The NCP designates the DoD as the removal response authority for ordnance and explosives hazards.

Non-Time-Critical Removal Action (NTCRA) - An action initiated in response to a release or threat of a release that poses a risk to human health and welfare, or the environment. Initiation of removal cleanup actions may be delayed for six months or more.

Range – A designated land or water area that is set aside, managed, and used for range activities by the DoD. The term includes firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas. The term also includes airspace areas designated for military use.